



### **ITEM FOR ENVIRONMENTAL COMMISSION AGENDA**

**COMMISSION MEETING DATE:** April 15, 2020

**NAME & NUMBER OF PROJECT:** Water Oak Apartments  
SP-2019-0109C

**NAME OF APPLICANT OR ORGANIZATION:** Gemsong Ryan  
Jones Carter

**LOCATION:** 12125 S IH 35, Austin, TX 78747

**COUNCIL DISTRICT:** District 5

**ENVIRONMENTAL REVIEW STAFF:** Pamela Abee-Taulli, Environmental Review Specialist Senior,  
Development Services Department, 512-974-1879

**WATERSHED:** Onion Creek Watershed, Suburban Classification, Desired Development Zone

**REQUEST:** Variance request is as follows:  
1. Request to vary from LDC 25-8-341 to allow cut in excess of 4 feet on slopes exceeding 15 percent.

**STAFF RECOMMENDATION:** Staff recommends this variance with conditions, having determined the findings of fact to have been met.

**STAFF CONDITIONS:**

1. Stockpile and reserve topsoil for use in revegetation of disturbed areas.
2. Revegetate disturbed areas adjacent to creek and pond with riparian plantings per 609S.6.
3. Use enhanced erosion & sedimentation controls during construction to prevent outflow of sediment-laden water from pond.



Development Services Department  
Staff Recommendations Concerning Required Findings

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Project Name:	Water Oak Apartments
Ordinance Standard:	Watershed Protection Ordinance
Variance Request:	Request to vary from LDC 25-8-341 to allow cut in excess of 4 feet, to 13 feet, on slopes exceeding 15 percent.

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Include an explanation with each applicable finding of fact.

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes The site slopes toward the middle, from east and west, toward an unclassified creek (drainage area less than 64 acres) that bisects the lot (see Applicant Exhibit 4 for topography). With a gross site area of 21.4 acres, 1.6 acres have slopes between 15 and 25 percent, 0.5 acres have slopes from 25 to 35 percent, and 0.04 acres have slopes over 35 percent. The steepest slopes are at the north, downstream end of the creek. This is also the best location for the detention pond, since it is the lowest point of the site.

Developers of similarly situated properties have been allowed to grade over 4 feet for ponds located on steep slopes.

2. The variance:

- a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes The variance is not necessitated by the layout. The steepest slopes are located in the most logical location for stormwater detention.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes The variance is minimum deviation. The pond volume has been minimized by use of rain gardens to treat the entire water

quality volume. The pond shape has been designed to maximize tree protection.

- c) Does not create a significant probability of harmful environmental consequences.

Yes The variance does not create a significant probability of harmful environmental consequences. Erosion and sedimentation controls have been designed to prevent runoff during construction and post-development runoff is required to match pre-development.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes The variance will not adversely affect water quality.

- B. The Land Use Commission may grant a variance from a requirement of Section 25-8-422 (*Water Supply Suburban Water Quality Transition Zone*), Section 25-8-452 (*Water Supply Rural Water Quality Transition Zone*), Section 25-8-482 (*Barton Springs Zone Water Quality Transition Zone*), Section 25-8-368 (*Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long*), or Article 7, Division 1 (*Critical Water Quality Zone Restrictions*), after determining that::

1. The criteria for granting a variance in Subsection (A) are met;

NA

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;

NA

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

NA

Staff Determination: Staff determines that the findings of fact have been met. Staff recommends the following conditions:

1. Stockpile and reserve topsoil for use in revegetation of disturbed areas.
2. Revegetate disturbed areas adjacent to creek and pond with riparian plantings per 609S.6.
3. Use enhanced erosion & sedimentation controls during construction to prevent outflow of sediment-laden water from pond.

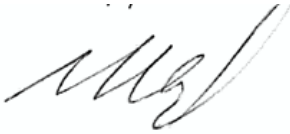
Environmental Reviewer  
(DSD)

  
(Pamela Abee-Taulli)

3/30/20

Date

Environmental Review  
Manager (DSD)



\_\_\_\_\_  
(Mike McDougal)

3/30/20

\_\_\_\_\_  
Date

Environmental Officer  
(WPD)



\_\_\_\_\_  
(Chris Herrington)

4/02/2020

\_\_\_\_\_  
Date



## ENVIRONMENTAL COMMISSION VARIANCE APPLICATION FORM

### PROJECT DESCRIPTION

#### Applicant Contact Information

Name of Applicant	Gemsong N. Ryan, P.E.
Street Address	3100 Alvin Devane Blvd Suite 150
City State ZIP Code	Austin, Texas 78741
Work Phone	512-685-5131
E-Mail Address	gryan@jonescarter.com

#### Variance Case Information

Case Name	Water Oak Apartments
Case Number	SP-2019-0109C
Address or Location	12125 S IH 35 SVRD
Environmental Reviewer Name	Pamela Abee-Taulli
Environmental Resource Management Reviewer Name	N/A
Applicable Ordinance	Watershed Protection Ordinance
Watershed Name	Onion Creek
Watershed Classification	<input type="checkbox"/> Urban <input checked="" type="checkbox"/> Suburban <input type="checkbox"/> Water Supply Suburban <input type="checkbox"/> Water Supply Rural <input type="checkbox"/> Barton Springs Zone

Edwards Aquifer Recharge Zone	<input type="checkbox"/> Barton Springs Segment <input type="checkbox"/> Northern Edwards Segment <input checked="" type="checkbox"/> Not in Edwards Aquifer Zones
Edwards Aquifer Contributing Zone	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Distance to Nearest Classified Waterway	Approx. 1200 LF
Water and Waste Water service to be provided by	Austin Water Utility
Request	<p>The variance request is as follows (Cite code references):</p> <p>A variance is requested from LDC 25-8—341 (A)(4)(C) to cut greater than 4 feet on a 15% or greater slope.</p>

Impervious cover	Existing	Proposed
square footage:	<u>0</u>	<u>320,340</u>
acreage:	<u>0</u>	<u>7.35</u>
percentage:	<u>0%</u>	<u>41.8%</u>
Provide general description of the property (slope range, elevation range, summary of vegetation / trees, summary of the geology, CWQZ, WQTZ, CEFs, floodplain, heritage trees, any other notable or outstanding characteristics of the property)	<p>The existing topography of the subject tract consists of natural slopes ranging from 1%-20%. The site contains portions that are in excess of 15% slope. The highest point of the site is located along the southern boundary at an elevation of 722 feet above sea level. The lowest point of the site is located at the north-eastern corner of the site at an elevation of approximately 663 feet above sea level. The site is currently undeveloped. There is a small swale in the center of the Water Oak Apartments site plan. The site is currently undeveloped as pasture with brush and trees. According to the Natural Resource Conservation Soil Survey of Travis County, Texas, soils on the property are classified in 99.9% in Hydrologic Soil Group D and 0.1% in Hydrologic Soil Group D. The soils are predominantly Brackett-Rock outcrop complex, with 1-12% slopes and Heiden clay, with 5-8% slopes. The site is located in the Onion Creek Watershed which is classified as a suburban watershed. There are several heritage trees on site, but the only one being removed has been classified as dead by an arborist.</p>	

Clearly indicate in what way the proposed project does not comply with current Code (include maps and exhibits)	More than 4 feet of cut on slopes greater than 15% is required to utilize a portion of an existing drainage swale as a detention pond. The additional cut is necessary to avoid excessive cut/fill in other locations because the detention pond is located at the existing low point of the site.
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### FINDINGS OF FACT

As required in LDC Section 25-8-41, in order to grant a variance the Land Use Commission must make the following findings of fact:

Include an explanation with each applicable finding of fact.

Project: Water Oak Apartments

Ordinance: LDC 25-8-341 (A)(4)(C)

A. Land Use Commission variance determinations from Chapter 25-8-41 of the City Code:

1. The requirement will deprive the applicant of a privilege available to owners of similarly situated property with approximately contemporaneous development subject to similar code requirements.

Yes / No      The only possible location for an appropriately sized detention pond for this project is in the proposed location. This site would not be permittable without detention.

2. The variance:
  - a) Is not necessitated by the scale, layout, construction method, or other design decision made by the applicant, unless the design decision provides greater overall environmental protection than is achievable without the variance;

Yes / No      We are using the natural lowest spot on the site while saving as many protected trees as possible and not removing any heritage trees.

- b) Is the minimum deviation from the code requirement necessary to allow a reasonable use of the property;

Yes / No      We are only requesting cut over 4 feet on 15% or greater slopes on 0.18 acres of area.

- c) Does not create a significant probability of harmful environmental consequences.

Yes / No      We will have retaining walls to avoid cutting into more areas upstream and on the side slopes of the pond.

3. Development with the variance will result in water quality that is at least equal to the water quality achievable without the variance.

Yes / No      Water quality is provided upstream of the detention pond.

- B. Additional Land Use Commission variance determinations for a requirement of Section 25-8-422 (Water Quality Transition Zone), Section 25-8-452 (Water Quality Transition Zone), Article 7, Division 1 (Critical Water Quality Zone Restrictions), or Section 25-8-368 (Restrictions on Development Impacting Lake Austin, Lady Bird Lake, and Lake Walter E. Long):

1. The criteria for granting a variance in Subsection (A) are met;

Yes / No      N/A

2. The requirement for which a variance is requested prevents a reasonable, economic use of the entire property;

Yes / No      N/A

3. The variance is the minimum deviation from the code requirement necessary to allow a reasonable, economic use of the entire property.

Yes / No      N/A

**\*\*Variance approval requires all above affirmative findings.**



3100 Alvin Devane Boulevard, Suite 150  
Austin, Texas 78741-7425  
Tel: 512.441.9493  
Fax: 512.445.2286  
[www.jonescarter.com](http://www.jonescarter.com)

December 8, 2016

Pamela Abee-Tualli, LEED, CPESC  
COA Development Services Department  
One Texas Center  
505 Barton Springs Road  
Austin, Texas 78705

Re: Cut Variance  
Water Oak Apartments  
12125 S IH 35 Svrld  
SP-2019-0109C

Dear Ms. Abee-Tualli:

On behalf of our client, Three Hills Land LLC, Jones & Carter, Inc. is requesting an Environmental Commission variance of LDC Section 25-8-341(A)(4)(C) from the greater than 4-foot cut restriction on slopes over 15%.

The site plan consists of 17.599 acres including 14 multi-family buildings and a clubhouse with surface parking and associated improvements. The entire project proposes 41.8% impervious cover with 60% allowed by watershed. In order to locate the detention pond at the lowest portion of the site as well as size it correctly for the Atlas 14 100-year storm event, we will need to cut to a maximum of 13 feet on 0.18 acres over 15%. The placement of the pond at this location of the project will minimize site disturbance and the depth of cut needed at other locations outside of the 15% slope zone. The pond is for in-line detention only as the water quality is proposed in a series of rain gardens to avoid any additional cut in the 15% slope zone. The pond was also shaped to avoid heritage trees and as many protected trees as possible.

If you have any questions or require additional information, please contact me at (512) 441-9493.

Sincerely,

Gemsong N. Ryan, P.E.

**EXHIBITS**

OVERALL AERIAL VIEW ..... EXHIBIT 1

SITE PHOTOS..... EXHIBIT 2

CONTEXT MAP ..... EXHIBIT 3

EXISTING TOPOGRAPHY AND TREE MAP..... EXHIBIT 4

CUT-FILL MAP ..... EXHIBIT 5

SITE PLAN..... EXHIBIT 6

ENVIRONMENTAL MAP ..... EXHIBIT 7

ENVRIONMENTAL RESOURCE INVENTORY..... EXHIBIT 8

**EXHIBIT 1**  
**OVERALL AERIAL VIEW**



This product is for informational purposes and may not have been prepared for or be suitable for legal, engineering, or surveying purposes. It does not represent an on-the-ground survey. This product has been produced by the City of Austin for the sole purpose of geographic reference. No warranty is made by the City of Austin regarding specific accuracy or completeness.

### Legend

### Street Labels

☐ TCAD Parcels

## Notes

## **EXHIBIT 2**

## **SITE PHOTOS**







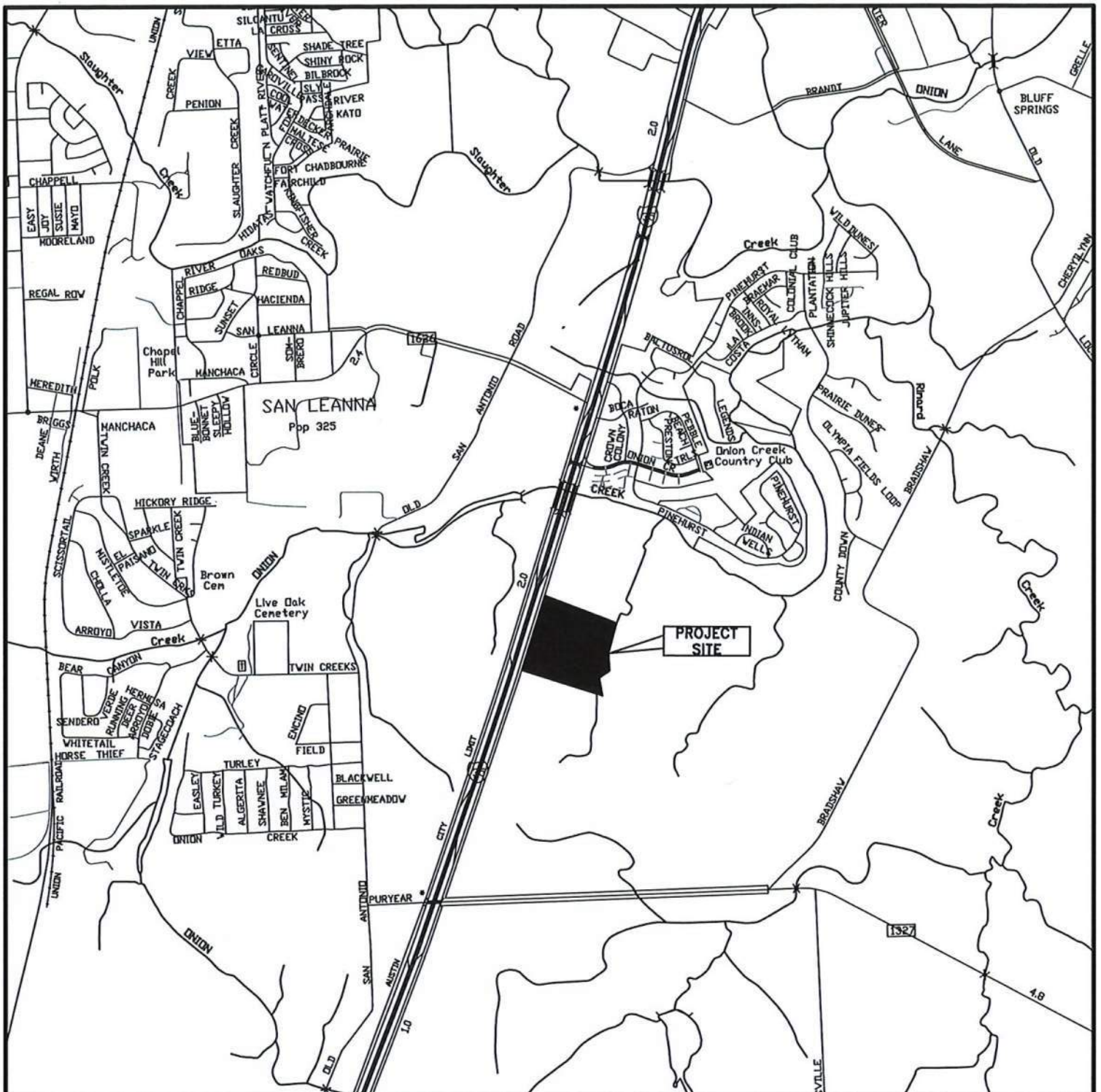






## **EXHIBIT 3**

## **CONTEXT MAP**



## SITE LOCATION MAP

12525 S IH 35  
Austin, TX

SCALE: NTS DGN. BY: NZ  
DATE: 03/08/2019 DWN. BY: NZ  
JOB NO. 0A836-0006-00 DWG. NO. -  
SUBMITTED: - SURV. BY: -  
F.B. NO. -



**JONES CARTER**

Texas Board of Professional Engineering Firm Registration No. F-439  
3100 Alvin Devane Blvd., Suite 150 Austin, Texas 78741 • 512.441.9493

SHEET NO.

1

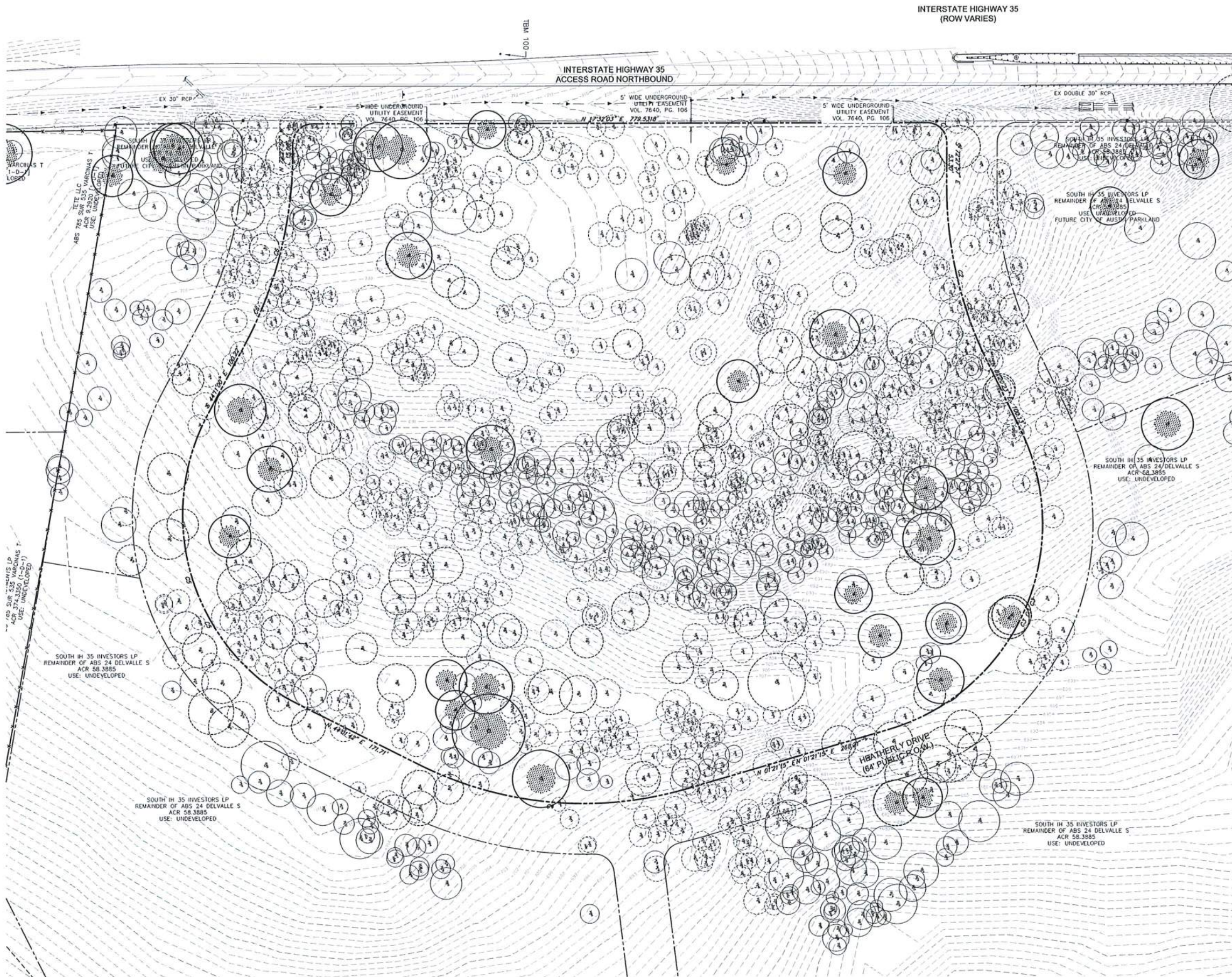
OF 1

**EXHIBIT 4**  
**EXISTING TOPOGRAPHIC AND TREE**  
**MAP**

1  
2  
3  
4

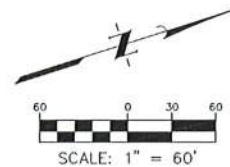
© 2018 Jones & Carter

C:\DASH\JAMES-0001-00 Multifamily Site at IH-35 S and IH-45 SE.dwg (JAC)\JAMES-0001-00 EXIST TOPO AND TREE.dwg JER, February 26, 2020



INTERSTATE HIGHWAY 35  
(ROW VARIES)

INTERSTATE HIGHWAY 35  
ACCESS ROAD NORTHBOUND



#### EXISTING LEGEND

- W W FIRE HYDRANT W/ GATE VALVE
- W W WATERLINE W/ GATE VALVE
- W W WATERLINE W/ METER
- W W WASTEWATER W/ MANHOLE
- W W WASTEWATER W/ CLEANOUT
- W W STORM SEWER W/ MANHOLE
- W W STORM SEWER W/ CURB INLET
- W W OVERHEAD ELECTRIC W/POWER POLE
- W W UNDERGROUND TELECOM
- W W GROUND CONTOUR
- 123 TREE TO REMAIN (8" - 18")
- 123 TREE TO BE REMOVED (8" - 18")
- 123 PROTECTED TREE TO REMAIN (19" - 23")
- 123 PROTECTED TREE TO BE REMOVED (19" - 23")
- 123 HERITAGE TREE TO REMAIN W/ HALF CRITICAL FOOT ZONE HATCHING (CERTAIN SPECIES 24"+)
- 123 HERITAGE TREE TO BE REMOVED (DEAD PER ARBORIST)

Surveys Performed by Bury Aus, Inc. on 9/16/2014,  
Jones & Carter, Inc. on 12/12/2018, 8/22/2019, and  
10/17/2019, and reassessed by The Davey Tree Expert  
Company on November 7, 2019.

CURVE	ARC	LENGTH	RADIUS	DELTA ANGLE	CHORD BEARING	CHORD LENGTH
C1	39.27	25.00	90.00	N 67°32'03" E 35.56		
C2	229.50	502.00	12611.40	S 85°33'47" E 227.51		
C3	457.82	268.00	1100.00	N 48°39'11" W 410.64		
C4	348.57	468.00	14240.77	N 72°41'28" E 340.57		
C5	429.34	268.00	9147.18	N 89°55'21" E 384.88		
C6	247.80	502.00	12616.57	S 58°19'28" E 245.29		
C7	39.27	25.00	90.00	N 72°27'57" W 35.56		

THREE HILLS APARTMENTS  
Multifamily Site at IH-35 S and IH-45 SE

## EXISTING TOPO & TREE SURVEY

SHEET NO.

1

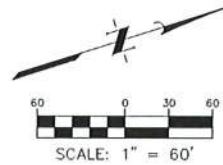
OF

App.	
REVISIONS	
No.	Date
<b>JONES CARTER</b> Texas Board of Professional Engineers Registration No. F-439 3100 Alvin Avenue Boulevard, Suite 150 • Austin, Texas 78741 • 512.441.9993	
SCALE: AS SHOWN	DESIGNED BY: JR
DATE: FEBRUARY 2020	CHECKED BY: GNR
JOB NO.: ABS-006	DRAWN BY: JR

# **EXHIBIT 5**

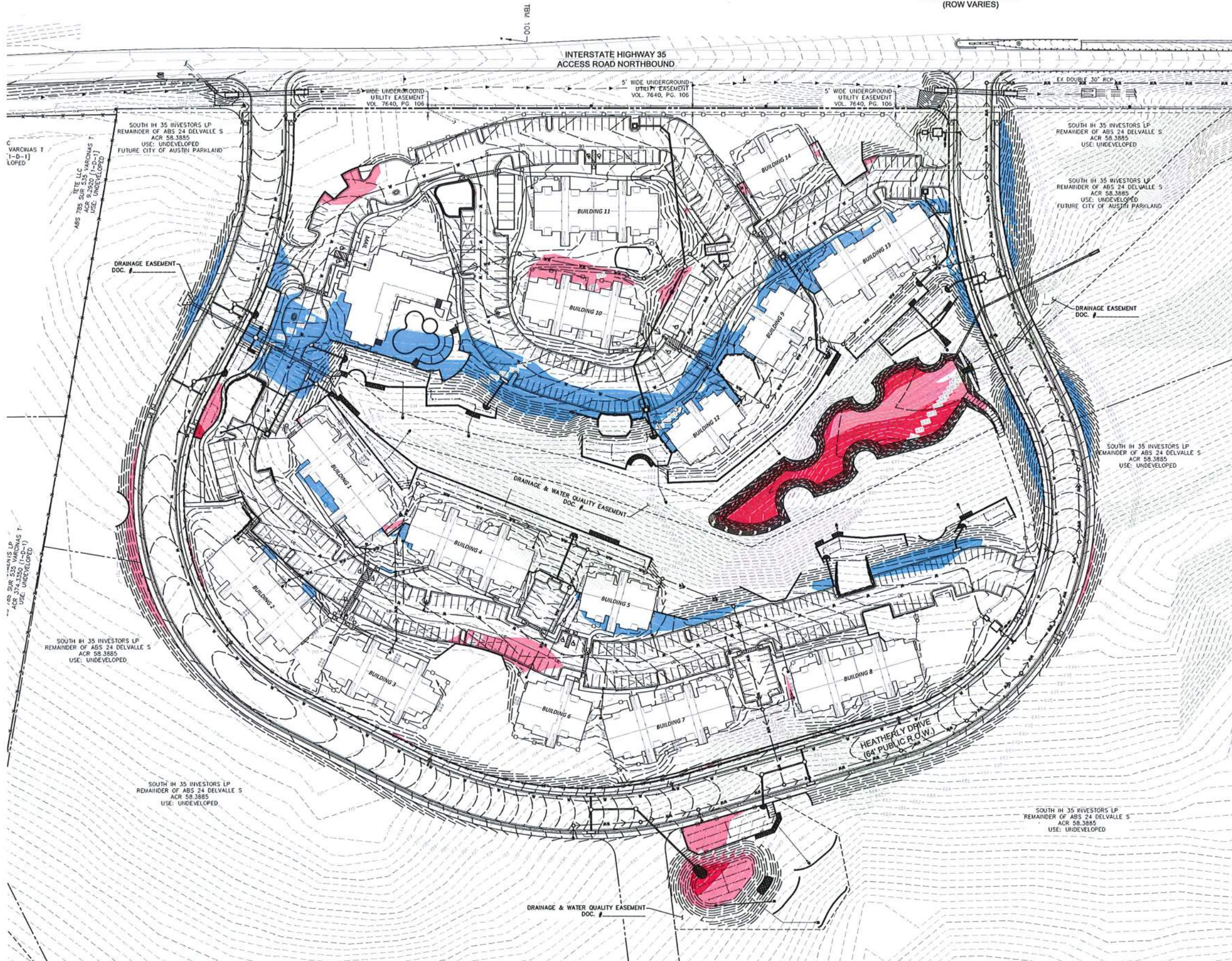
## **CUT-FILL MAP**

THE LOCATION OF EXISTING UNDERGROUND UTILITIES ARE SHOWN IN AN APPROXIMATE WAY ONLY. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK. HE AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY HIS FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND UTILITIES.

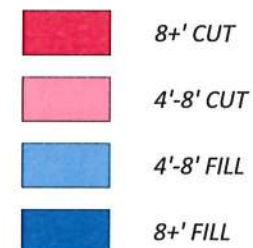


INTERSTATE HIGHWAY 35  
(ROW VARIES)

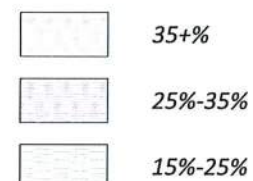
INTERSTATE HIGHWAY 35  
ACCESS ROAD NORTHBOUND



CUT/FILL



SLOPES



SITE PLAN APPROVAL SHEET \_\_\_\_\_ OF 120  
FILE NUMBER: SP-2019-0109C APPLICATION DATE: MARCH 13, 2019  
APPROVED BY COMMISSION ON \_\_\_\_\_ UNDER SECTION 112 OF  
CHAPTER 25-B OF THE CITY OF AUSTIN CODE  
EXPIRATION DATE (15-5-81, LDC) CASE MANAGER J. Smith  
PROJECT EXPIRATION DATE (ORD #97005 A) DIVISION D02

Director, Development Services Department  
RELEASED FOR GENERAL COMPLIANCE: ZONING: MF-4

Rev. 1 \_\_\_\_\_ Correction 1  
Rev. 2 \_\_\_\_\_ Correction 2  
Rev. 3 \_\_\_\_\_ Correction 3

Fiscal plan must be reviewed by the Project Expiration Date, if applicable. Subsequent Site Plans which do not comply with the Code current at the time of filing, and all required Building Permits and/or a notice of construction of a building permit is not required, must also be approved prior to the Project Expiration Date.

REVIEWS	No.	Date

**JONES CARTER**  
Texas Board of Professional Engineers Registration No. F-439  
3100 Main Avenue Boulevard, Suite 150 • Austin, Texas 78751 • 512.441.9493

SCALE: AS SHOWN  
DATE: MARCH 13, 2019  
JOB NO.: DA35-0006

DESIGNED BY: NZ  
CHECKED BY: GNR  
DRAWN BY: SH



Three Hills Land LLC  
THREE HILLS APARTMENTS - PHASE ONE

CUTFILL EXHIBIT

# **EXHIBIT 6**

## **SITE PLAN**

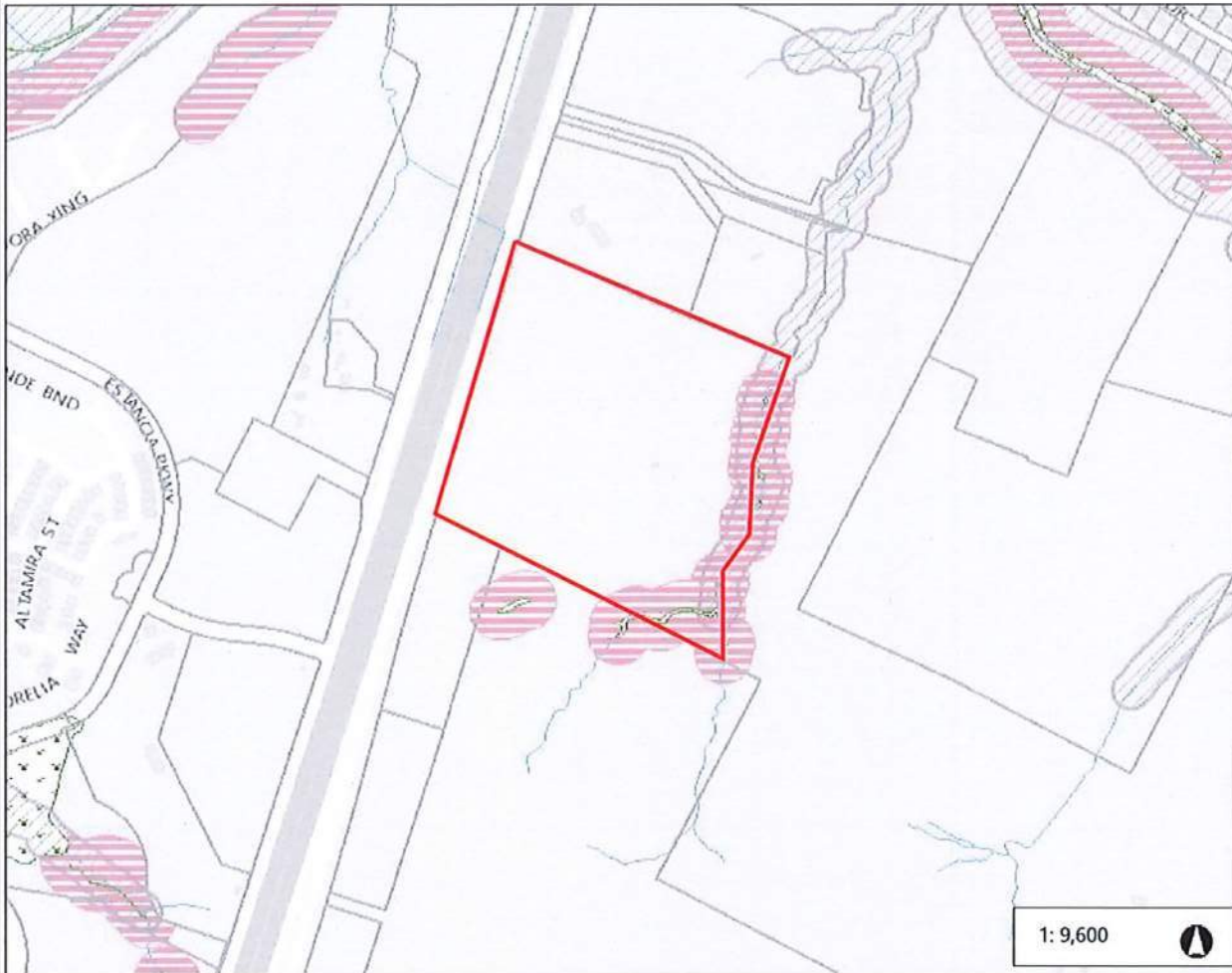


# **EXHIBIT 7**

## **ENVIRONMENTAL MAP**



## Property Profile



1: 9,600



0.3 0 0.15 0.3 Miles

NAD\_1983\_StatePlane\_Texas\_Central\_FIPS\_4203\_Feet

Date Printed:

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## Legend

- ☐ TCAD Parcels
- ☐ Creek Buffers/Waterway Setba
- ☒ Critical Water Quality Zone
- ☐ Water Quality Transition Zone
- ☒ Welland
- ☐ Creek Centerlines
- ☐ Lakes
- ☐ Biological Resource Buffer

## Notes

**EXHIBIT 8**  
**ENVIRONMENTAL RESOURCE**  
**INVENTORY**

## Environmental Resource Inventory

For the City of Austin  
Related to LDC 25-8-121, City Code 30-5-121, ECM 1.3.0 & 1.10.0

The ERI is required for projects that meet one or more of the criteria listed in LDC 25-8-121(A), City Code 30-5-121(A).

1. SITE/PROJECT NAME: 12001 S IH-35 Tract
2. COUNTY APPRAISAL DISTRICT PROPERTY ID (#'s): 352002
3. ADDRESS/LOCATION OF PROJECT: 12001 S IH-35
4. WATERSHED: Onion Creek
5. THIS SITE IS WITHIN THE (Check all that apply)  
Edwards Aquifer Recharge Zone\* (See note below) ..... ☐ YES ☒ NO  
Edwards Aquifer Contributing Zone\* ..... ☐ YES ☒ NO  
Edwards Aquifer 1500 ft Verification Zone\* ..... ☐ YES ☒ NO  
Barton Spring Zone\* ..... ☐ YES ☒ NO  
*\*(as defined by the City of Austin – LDC 25-8-2 or City Code 30-5-2)*

**Note:** If the property is over the Edwards Aquifer Recharge zone, the Hydrogeologic Report and karst surveys must be completed and signed by a Professional Geoscientist Licensed in the State of Texas.

6. DOES THIS PROJECT PROPOSE FLOODPLAIN MODIFICATION?..... ☐ YES\*\* ☒ NO  
If yes, then check all that apply:  
☐ (1) The floodplain modifications proposed are necessary to protect the public health and safety;  
☐ (2) The floodplain modifications proposed would provide a significant, demonstrable environmental benefit, as determined by a **functional assessment** of floodplain health as prescribed by the Environmental Criteria Manual (ECM), or  
☐ (3) The floodplain modifications proposed are necessary for development allowed in the critical water quality zone under LDC 25-8-261 or 25-8-262, City Code 30-5-261 or 30-5-262.  
☐ (4) The floodplain modifications proposed are outside of the Critical Water Quality Zone in an area determined to be in poor or fair condition by a **functional assessment** of floodplain health.

**\*\* If yes, then a functional assessment must be completed and attached to the ERI (see ECM 1.7 and Appendix X for forms and guidance) unless conditions 1 or 3 above apply.**

7. IF THE SITE IS WITHIN AN URBAN OR SUBURBAN WATERSHED, DOES THIS PROJECT PROPOSE A UTILITY LINE PARALLEL TO AND WITHIN THE CRITICAL WATER QUALITY ZONE? ..... ☐ YES\*\*\* ☒ NO

**\*\*\*If yes, then riparian restoration is required by LDC 25-8-261(E) or City Code 30-5-261(E) and a functional assessment must be completed and attached to the ERI (see ECM 1.5 and Appendix X for forms and guidance).**

8. There is a total of 9 (#'s) Critical Environmental Feature(s)(CEFs) on or within 150 feet of the project site. If CEF(s) are present, attach a detailed **DESCRIPTION** of the CEF(s), color **PHOTOGRAPHS**, the **CEF WORKSHEET** and provide **DESCRIPTIONS** of the proposed CEF buffer(s) and/or wetland mitigation. Provide the number of each type of CEFs on or within 150 feet of the site (Please provide the number of CEFs):

0 (#s) Spring(s)/Seep(s)    0 (#s) Point Recharge Feature(s)    0 (#s) Bluff(s)  
0 (#s) Canyon Rimrock(s)    9 (#s) Wetland(s)

**Note: Standard buffers for CEFs are 150 feet, with a maximum of 300 feet for point recharge features. Except for wetlands, if the standard buffer is not provided, you must provide a written request for an administrative variance from LDC 25-8-281(C)(1) and provide written findings of fact to support your request. Request forms for administrative variances from requirements stated in LDC 25-8-281 are available from Watershed Protection Department.**

9. The following site maps are attached at the end of this report (Check all that apply and provide):

All ERI reports must include:

- ☒ Site Specific Geologic Map with 2-ft Topography
- ☒ Historic Aerial Photo of the Site
- ☒ Site Soil Map
- ☒ Critical Environmental Features and Well Location Map on current Aerial Photo with 2-ft Topography

Only if present on site (Maps can be combined):

- ☐ Edwards Aquifer Recharge Zone with the 1500-ft Verification Zone  
(Only if site is over or within 1500 feet the recharge zone)
- ☐ Edwards Aquifer Contributing Zone
- ☐ Water Quality Transition Zone (WQTZ)
- ☒ Critical Water Quality Zone (CWQZ)
- ☐ City of Austin Fully Developed Floodplains for all water courses with up to 64-acres of drainage

10. **HYDROGEOLOGIC REPORT** – Provide a description of site soils, topography, and site specific geology below (Attach additional sheets if needed):

**Surface Soils** on the project site is summarized in the table below and uses the SCS Hydrologic Soil Groups\*. If there is more than one soil unit on the project site, show each soil unit on the site soils map.

Soil Series Unit Names, Infiltration Characteristics & Thickness		
Soil Series Unit Name & Subgroup**	Group*	Thickness (feet)
Brackett-Rock outcrop complex, 1-12% slopes (BID)	C	0 to 4.0
Eddy gravelly loam, 0-3% slopes (EdB)	C	0.5 to 1.25
Eddy gravelly loam, 3-6% slopes (EdC)	C	0.5 to 1.25
Ferris-Heiden complex, 8-20% slopes, severely eroded (FhF3)	D	>5
Heiden clay, 5-8% slopes, moderately eroded (HeD2)	D	>5

**\*Soil Hydrologic Groups Definitions (Abbreviated)**

- A. Soils having a high infiltration rate when thoroughly wetted.
- B. Soils having a moderate infiltration rate when thoroughly wetted.
- C. Soils having a slow infiltration rate when thoroughly wetted.
- D. Soils having a very slow infiltration rate when thoroughly wetted.

\*\*Subgroup Classification – See Classification of Soil Series Table in County Soil Survey.

**Description of Site Topography and Drainage** *(Attach additional sheets if needed):*

Topographically, the subject site ranges from approximately 616 to 722 feet above mean sea level (COA, 2015 and USGS, 1988). Surface water flow on the majority of the subject site flows from west to east, typically by overland sheet flow toward an unnamed tributary of Onion Creek (USGS, 1988), which was observed along the eastern boundary of the subject site. The northwestern portion of the subject site drains from south to north toward a culvert in the northwestern corner of the subject site, under IH-35.

**List surface geologic units below:**

Geologic Units Exposed at Surface		
Group	Formation	Member
	Ozan Formation (Ko)	
	Pecan Gap Chalk (Kpg)	
	Austin Chalk (Kau)	

**Brief description of site geology** *(Attach additional sheets if needed):*

The Ozan Formation (Ko) is described as "Clay, marly, calcareous content decreases upward, montmorillonitic, some glauconite, phosphate pellets, and hematite and pyrite nodules, variable amount of silt-size quartz and calcite fragments, become more abundant upward, blocky with conchoidal fracture, light gray to brown; weathers light gray to grayish orange and white, develops poor fissility; thickness 600+ feet." The Pecan Gap Chalk (Kpg) is described as "Chalk in lower part grading upward to chalky marl with microgranular calcite in clay matrix, well-rounded quartz grains in lower part, medium gray; weathers light gray and white; thickness about 200 feet." The Austin Chalk (Kau) is described as "Chalk and marl; chalk mostly microgranular calcite with minor Foraminifera tests and Inoceramus prisms, averages about 85 percent calcium carbonate, ledge forming, grayish white to white; alternates with marl, bentonitic seams locally recessive, medium gray; pyrite nodules common, weather to limonite; thickness 325 to 420 feet (UT-BEG, 1995)."

**Wells** – Identify all recorded and unrecorded wells on site (test holes, monitoring, water, oil, unplugged, capped and/or abandoned wells, etc.):

There are 0 (#) wells present on the project site and the locations are shown and labeled

     (#s) The wells are not in use and have been properly abandoned.

     (#s) The wells are not in use and will be properly abandoned.

     (#s) The wells are in use and comply with 16 TAC Chapter 76.

There are 0 (#s) wells that are off-site and within 150 feet of this site.

11. THE VEGETATION REPORT – Provide the information requested below:

**Brief description of site plant communities** *(Attach additional sheets if needed):*

Vegetation on the subject site consisted of mostly wooded rangeland with a thick understory and vegetative cover. Clearing of understory vegetation was observed on the southeastern portion of the subject site. Riparian species were observed along the eastern portion of the subject site, along the unnamed tributary of Onion Creek.

There is woodland community on site .....☒ YES ☐ NO *(Check one).*

If yes, list the dominant species below:

Woodland species	
Common Name	Scientific Name
Ashe juniper	Juniperus ashei
plateau live oak	Quercus fusiformis
saw greenbrier	Smilax bona-nox
Queen Anne's lace	Daucus carota
twistleaf yucca	Yucca rupicola

There is grassland/prairie/savanna on site.....☐ YES ☒ NO *(Check one).*

If yes, list the dominant species below:

Grassland/prairie/savanna species	
Common Name	Scientific Name

There is hydrophytic vegetation on site .....☒ YES ☐ NO *(Check one).*

If yes, list the dominant species in table below *(next page):*

Hydrophytic plant species		
Common Name	Scientific Name	Wetland Indicator Status
soft rush	Juncus sp.	OBL
common spike rush	Eleocharis palustris	OBL

A tree survey of all trees with a diameter of at least eight inches measured four and one-half feet above natural grade level has been completed on the site.

☒ YES ☐ NO (Check one).

**12. WASTEWATER REPORT** – Provide the information requested below.

Wastewater for the site will be treated by (Check of that Apply):

- ☐ On-site system(s)  
☐ City of Austin Centralized sewage collection system  
☒ Other Centralized collection system

*Note: All sites that receive water or wastewater service from the Austin Water Utility must comply with City Code Chapter 15-12 and wells must be registered with the City of Austin*

The site sewage collection system is designed and will be constructed to in accordance to all State, County and City standard specifications.

☒ YES ☐ NO (Check one).

Calculations of the size of the drainfield or wastewater irrigation area(s) are attached at the end of this report or shown on the site plan.

☐ YES ☐ NO ☒ Not Applicable (Check one).

Wastewater lines are proposed within the Critical Water Quality Zone?

☐ YES ☒ NO (Check one). If yes, then provide justification below:

Is the project site is over the Edwards Aquifer?

☐ YES ☒ NO (Check one).

If yes, then describe the wastewater disposal systems proposed for the site, its treatment level and effects on receiving watercourses or the Edwards Aquifer.

**13. One (1) hard copy and one (1) electronic copy of the completed assessment have been provided.**

Date(s) ERI Field Assessment was performed: 15 March 2019  
Date(s)


My signature certifies that to the best of my knowledge, the responses on this form accurately reflect all information requested.

Rachel O'Leary

512-328-2430

Print Name

Telephone



roleary@horizon-esi.com

Signature

Email Address

Horizon Environmental Services, Inc.

19 March 2019; revised 25 June 2019

Name of Company

Date

For project sites within the Edwards Aquifer Recharge Zone, my signature and seal also certifies that I am a licensed Professional Geoscientist in the State of Texas as defined by ECM 1.12.3(A).

P.G.  
Seal

## City of Austin Environmental Resource Inventory - Critical Environmental Feature Worksheet

5	Primary Contact Name:	Rachel O'Leary
6	Phone Number:	512-328-2430
7	Prepared By:	Rachel O'Leary
8	Email Address:	roleary@horizon-esl.com




[illegible]

City of Austin Use Only	
CASE NUMBER:	

Please state the method of coordinate data collection and the approximate precision and accuracy of the points and the unit of measurement.

GPS	<input type="checkbox"/>	sub-meter	<input type="checkbox"/>
Surveyed	<input type="checkbox"/>	meter	<input type="checkbox"/>
Other	<input type="checkbox"/>	> 1 meter	<input type="checkbox"/>

Professional Geologists apply seal below

<p>For rimrock, locate the midpoint of the segment that describes the feature.</p> 	<p>For wetlands, locate the approximate centroid of the feature and the estimated area.</p> 	<p>For a spring or seep, locate the source of groundwater that feeds a pool or stream.</p> 
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**ENVIRONMENTAL RESOURCE INVENTORY ATTACHMENTS**

**12001 S IH-35 TRACT  
HJN 190054.001ERI**

#### DATA RESOURCES USED IN COMPLETING THIS ERI

(COA) City of Austin. Geographic Information Systems/Maps. *2012 2-foot Contours*, <<http://austintexas.gov/departments/gis-and-maps/gis-data>>. Updated 1 May 2015.

\_\_\_\_\_. *Property Profile*. City of Austin Property Profile web map application, <<http://www.austintexas.gov/gis/propertyprofile/>>. Accessed 12 March 2019.

(Nearmap) Nearmap US, Inc. Nearmap Vertical™ digital orthographic photograph. <<https://go.nearmap.com>> Imagery date 29 January 2019.

(NRCS) Natural Resources Conservation Service (formerly Soil Conservation Service), US Department of Agriculture. Web Soil Survey, <<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>. Accessed 12 March 2019.

(USGS) US Geological Survey. Digital Orthophoto Quarter-Quadrangle, Oak Hill, Texas. 1988.

\_\_\_\_\_. Aerial Photography, Travis County, Texas. 1995.

(UT-BEG) University of Texas Bureau of Economic Geology, C.V. Proctor, Jr., T.E. Brown, J.H. McGowen, N.B. Waechter, and V.E. Barnes. *Geologic Atlas of Texas*, Austin Sheet, Francis Luther Whitney Memorial Edition. 1974; reprinted 1995.

**ERI WORKSHEET SECTION 8:  
CRITICAL ENVIRONMENTAL FEATURES**

CEF Descriptions  
Descriptions of Proposed Buffers  
Color Photographs

### **Critical Environmental Features**

CEFs observed on or within 150 feet from the subject site include:

Springs/Seeps: 0  
Point Recharge Features: 0  
Bluffs: 0  
Canyon Rimrocks: 0  
Wetlands: 9

Nine (9) potential wetland CEFs were observed on or within 150 feet of the subject site. An unnamed tributary of Onion Creek was observed along the eastern boundary of the subject site. The tributary contained patches of sparse wetland vegetation within the defined bed and bank (CEF-1 to CEF-9).

No other potential CEFs were identified on or within 150 feet of the subject site. CEF feature dimensions and locations are provided on the attached City of Austin CEF worksheet and map, and photographs are attached.

### **Proposed Buffers**

The City of Austin generally requires that 150-foot buffer zones be placed on all CEFs. However, the City may accept a reduced buffer along the entire water feature that supports intermittent pockets of wetland vegetation within the banks of the waterway as a viable option. Horizon recommends maintaining at least a 50-foot water quality buffer along the entire length of the unnamed tributary of Onion Creek by the subject site's eastern boundary.

If development is proposed within the CEF buffers, an administrative variance and approved wetland mitigation may be required.



**PHOTO 1**  
**View of wetland CEF-1**



**PHOTO 2**  
**View of wetland CEF-2**



**PHOTO 3**  
**View of wetland CEF-3**



**PHOTO 4**  
**View of wetland CEF-4**



**PHOTO 5**  
Another view of wetland CEF-4



**PHOTO 6**  
View of wetland CEF-5



**PHOTO 7**  
View along wetland CEF-8



**PHOTO 8**  
Another view along wetland CEF-8



**PHOTO 9**

View of northwestern portion of the subject site, looking northwest toward a culvert under IH-35



**PHOTO 10**

Typical view of the subject site



**PHOTO 11**

Typical view of thick understory vegetation observed on the subject site

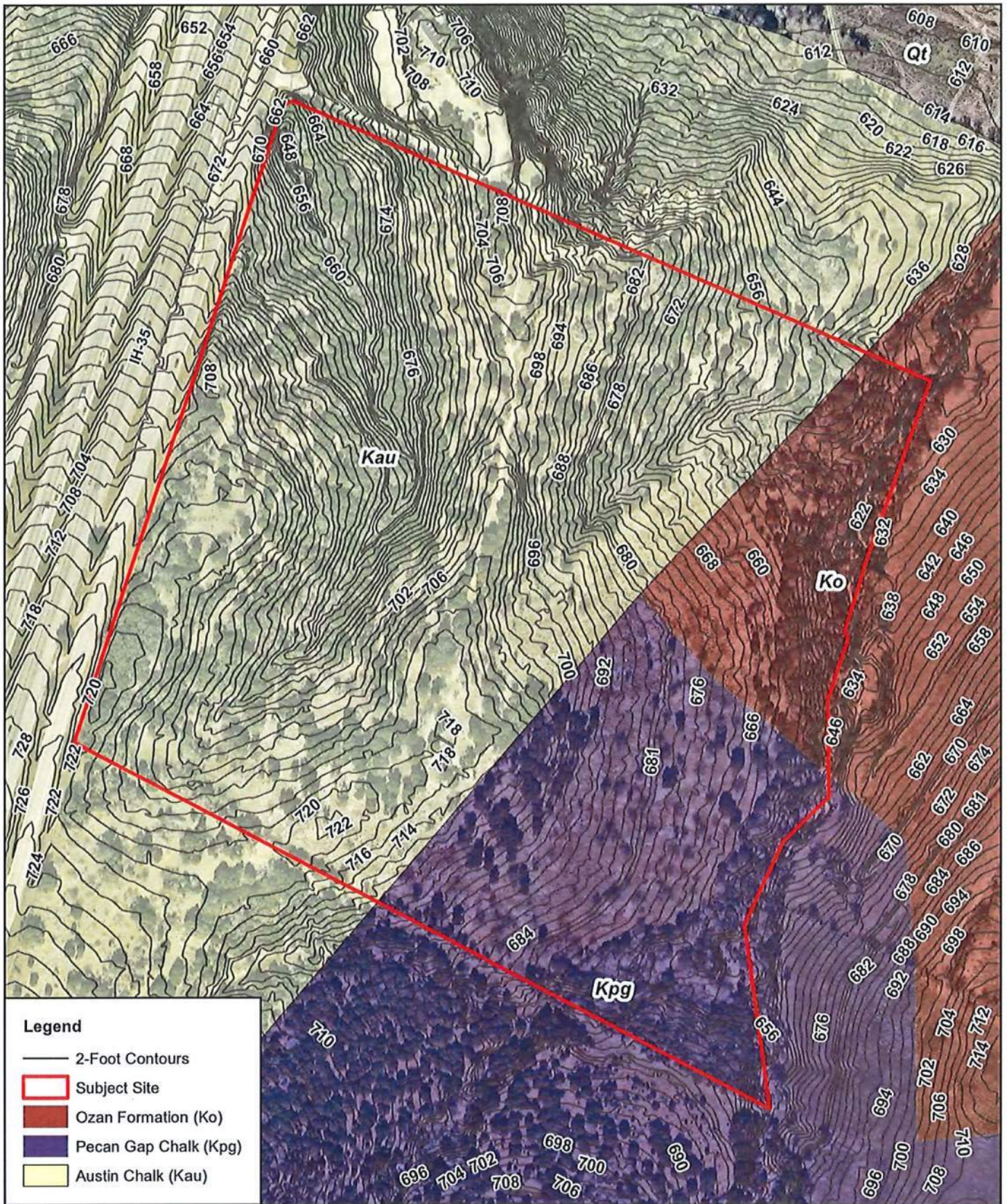


**PHOTO 12**

Typical view of the cleared areas on the southeastern portion of the subject site

**ERI WORKSHEET SECTION 9:  
SITE MAPS**

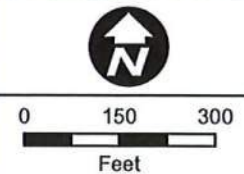
- Figure 1. Site-Specific Geologic Map
- Figure 2. Historical Aerial Photo
- Figure 3. Site Soil Map
- Figure 4. Critical Environmental Features and Well Locations Map
- Figure 5. Water Quality Zone Map



**Horizon**  
Environmental Services, Inc.

Date:	03/12/2019
Drawn:	RMO
HJN NO:	190054.001ERI
Source:	COA, 2015; Nearmap, 2019; UT-BEG, 1995

**Figure 1**  
Site-Specific Geologic Map  
12001 S IH-35 Tract  
Austin, Travis County, Texas





**Legend**

 Subject Site

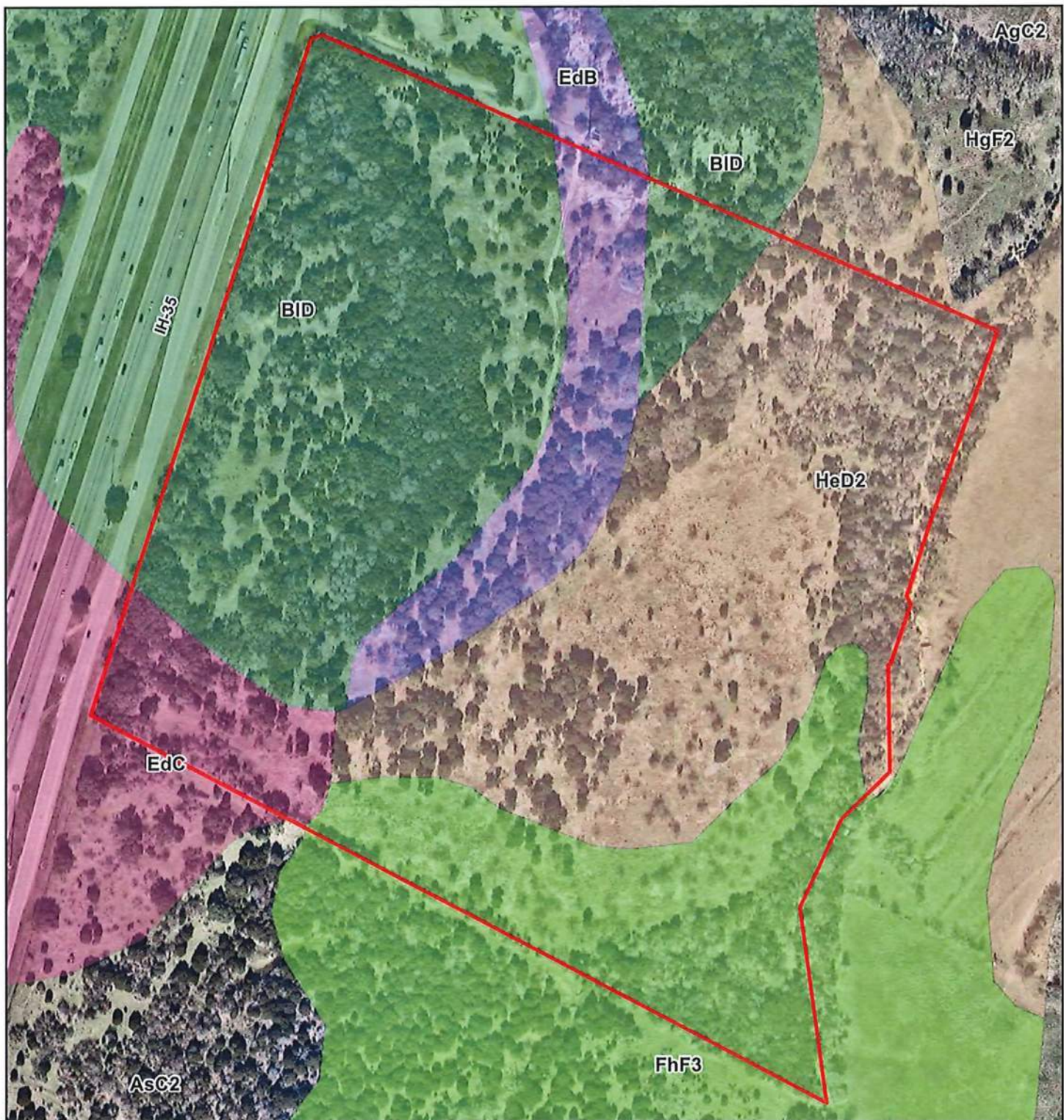
**Horizon.**  
Environmental Services, Inc.

Date:	03/12/2019
Drawn:	RMO
HJN NO:	190054.001ERI
Source:	USGS, 1995

**Figure 2**  
1995 Historical Aerial Photo  
12001 S IH-35 Tract  
Austin, Travis County, Texas



0 150 300  
Feet



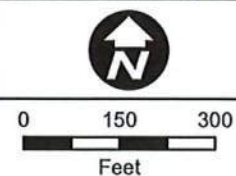
#### Legend

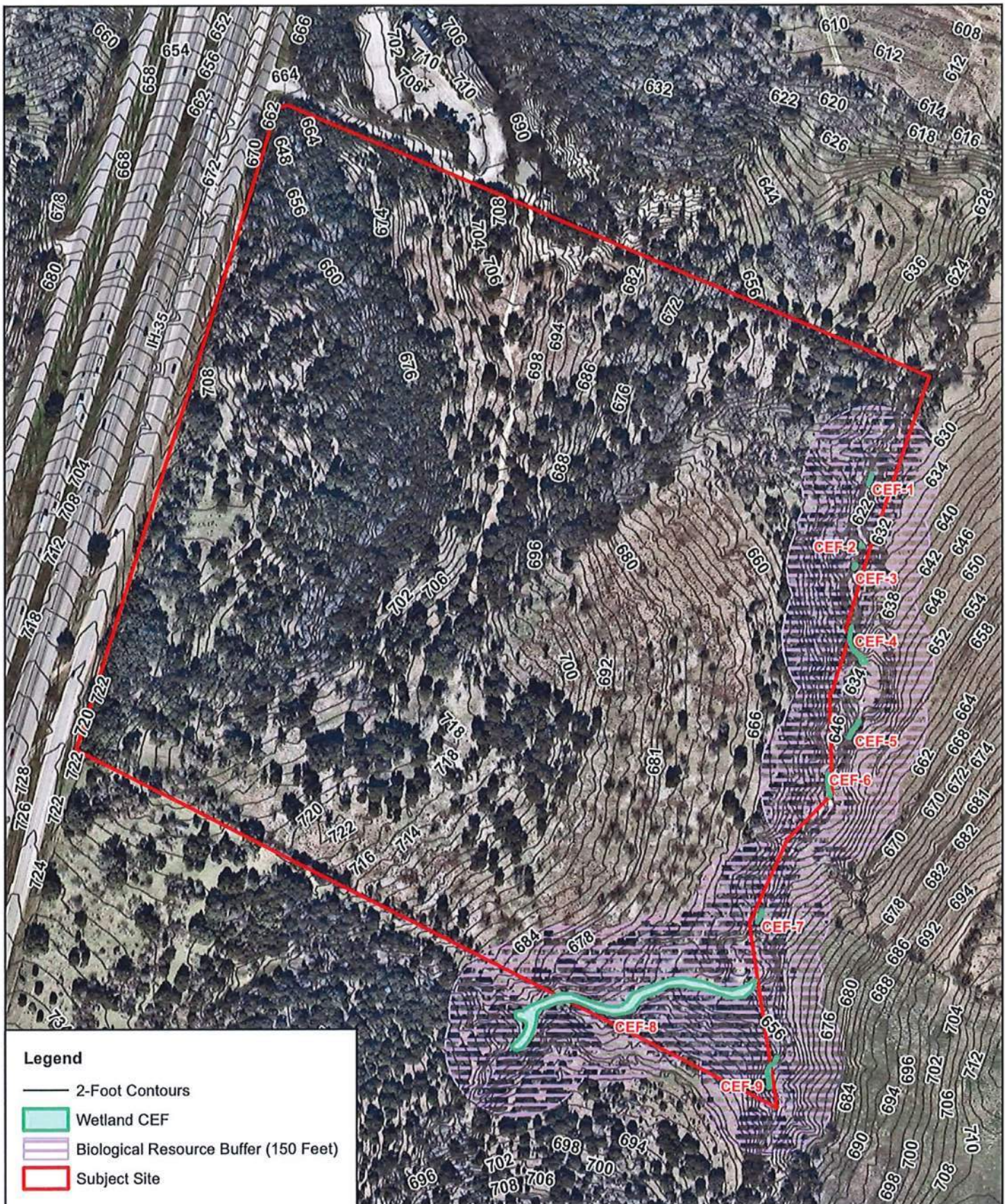
- |  |  |
|--|--|
| <span style="border: 2px solid red; display: inline-block; width: 20px; height: 10px; vertical-align: middle;"></span> Subject Site  | <span style="display: inline-block; width: 20px; height: 10px; background-color: #d9534f; vertical-align: middle;"></span> Eddy gravelly loam, 3-6% slopes (EdC)                       |
| <span style="display: inline-block; width: 20px; height: 10px; background-color: #2e8b57; vertical-align: middle;"></span> Brackett-Rock outcrop complex, 1-12% slopes (BID) | <span style="display: inline-block; width: 20px; height: 10px; background-color: #2e8b57; vertical-align: middle;"></span> Ferris-Heiden complex, 8-20% slopes, severely eroded (FhF3) |
| <span style="display: inline-block; width: 20px; height: 10px; background-color: #6a5acd; vertical-align: middle;"></span> Eddy gravelly loam, 0-3% slopes (EdB)             | <span style="display: inline-block; width: 20px; height: 10px; background-color: #d2b48c; vertical-align: middle;"></span> Heiden clay, 5-8% slopes, eroded (HeD2)                     |

**Horizon**  
Environmental Services, Inc.

Date:	03/12/2019
Drawn:	RMO
HJN NO:	190054.001ERI
Source:	Nearmap, 2019; NRCS, 2019

**Figure 3**  
Site Soil Map  
12001 S IH-35 Tract  
Austin, Travis County, Texas

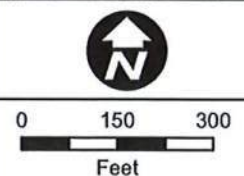


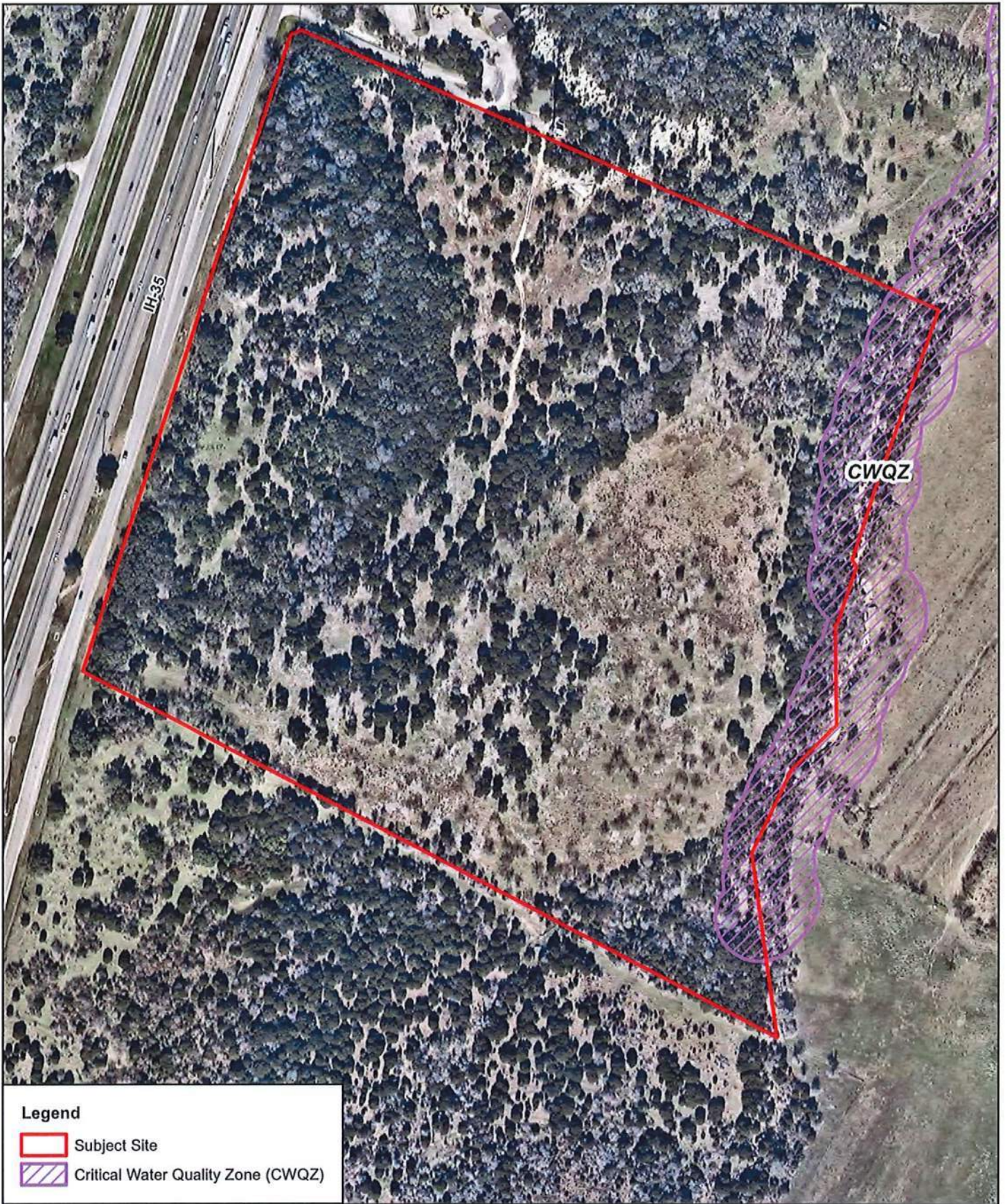


**Horizon**  
Environmental Services, Inc.



Date:	06/25/2019
Drawn:	RMO
HJN NO:	190054.001ERI
Source:	COA, 2015; Nearmap, 2019

**Figure 4**  
Critical Environmental Features  
and Well Locations Map  
12001 S IH-35 Tract  
Austin, Travis County, Texas





**Legend**

-  Subject Site
-  Critical Water Quality Zone (CWQZ)

**Horizon**  
Environmental Services, Inc.

Date:	03/12/2019
Drawn:	RMO
HJN NO:	190054.001ERI
Source:	COA, 2019; Nearmap, 2019

**Figure 5**  
Water Quality Zone Map  
12001 S IH-35 Tract  
Austin, Travis County, Texas

